



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,431	01/06/2004	Robert Baer	0132.67604	3776

7590 04/11/2005

Patrick G. Burns
GREER, BURNS & CRAIN, LTD.
Suite 2500
300 South Wacker Drive
Chicago, IL 60606

EXAMINER

REESE, DAVID C

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/752,431

Applicant(s)

BAER ET AL.

Examiner

David C. Reese

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This office action is in response to Applicant's amendment filed 2/24/2005.

Status of Claims

[1] Claims 1-8 are pending.

Response to Arguments

[2] Applicant's arguments filed 2/24/2005 regarding rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive. Applicants traverse the examiner's 103 rejections on the basis of DeHaitre and Godfrey. Applicants argue that Godfrey is not analogous art, and there is no suggestion or motivation to modify the references to obtain the present invention.

To begin, in response to Applicant's argument that Godfrey is nonanalogous art, it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174. In this case, Godfrey's invention does indeed have characteristics that do make the reference within the field of the inventor's endeavor; that of fasteners. Godfrey presents a fastener whose main objective is to provide a tight bond between a conventional tie plate, and a wooden tie. Means for doing so include the utilizing "a plurality of spaced rings" to help create a more secure or tight bond between the

Art Unit: 3677

fastener and the tie plate. Thus, regardless of the material by which the fastener is being driven into, the pertinence of this particular feature lies behind the capability of the prior art to perform the various claimed function, which in this case centers on securement. Further more, in the instant case, the only aspect from Godfrey that is being presented to combine with that of DeHaitre is the “plurality of spaced rings,” which happen to be extremely common and not a novel feature as shown through other art, not just as disclosed in Godfrey. Take, for example, the prior art of Clarke, 3,325, 135; Knohl, 4,462,730; and Rabe, 3,987,698.

Continuing, the fact that the rings found on Godfrey perform a different function, as stated by the Godfrey, does not mean that the rings are not capable of gathering as much material as possible once they are substituted onto the top of the screw as presented by DeHaitre. Once such a structure is presented onto a rotatable, threaded screw such as DeHaitre, the rings as structurally presented; that is, “a plurality of spaced rings” will, by the very nature of their structure, indeed be capable of emulating to some degree, the function of the spaced rings as presented by applicants. That is, “a plurality of spaced rings” as claimed by applicants is nothing more than, “a plurality of spaced rings.” This as opposed to a plurality of spaced rings with more defining and limiting features that distinguish why these rings prevent mushrooming and other spaced rings cannot.

In response to Applicant’s argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly

articulated. The test for combining references is what the combination of disclosures taken, as a whole would suggest to one of ordinary skill in the art. In *re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In *re Bozek*, 163 USPQ 545 (CCPA) 1969. In this case, though the motivation behind substituting the spaced rings from Godfrey onto that of DeHaitre may have been to help create a more stable connection between the fastener and the material as opposed to preventing mushrooming as proposed by applicant, this is irrelevant because one must keep in mind that as a result of such a substitution, the very structure of the plurality of spaced rings now present on the screw may not only help with securement but may as well “gather as much material as possible as the fastener is turned into the material”. The fact that applicant uses the spaced rings for a different purpose does not alter the conclusion that its use in a prior art device would be *prima facie* obvious from the purpose disclosed in the reference.” *In re Lintner*, 173 USPQ 560. Also, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Lastly, with regard to applicants argument that the rings in Godfrey are designed to collapse as they are inserted into the material does not change the fact that Godfrey does indeed possess “a plurality of spaced rings.” Regardless that the rings may collapse to some degree, they still retain their fundamental, “plurality of ring” structure, so as when they are substituted to the screw as presented by DeHaitre, one can assume that due to the very nature of the structure of the plurality of spaced rings that they will indeed gather material to some degree as DeHaitre

is being inserted into the material. The material in this case by which it is being inserted is irrelevant, because it is obvious to one skilled in the art to create a screw with a material based on what material it will be inserted into.

Claim Rejections - 35 USC § 103

[3] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[4] Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHaitre US-5,516,248 in view of Godfrey US-2,650,032.

DeHaitre teaches of a low torque wood screw.

However, DeHaitre fails to disclose expressly a screw that possesses a plurality of spaced rings.

Godfrey teaches of a track spike that possesses a plurality of rings on its upper portion, below the head of the spike.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the screw as taught by DeHaitre, to incorporate a plurality of rings as taught by Godfrey, in order to create a more profound bond between the screw and the substrate by which it is driven into.

Now as for Claim 1, DeHaitre discloses a low torque wood screw comprising:

a shaft (10 and 16 in Fig. 1 of DeHaitre),
a head at a first end of the shaft (20 in Fig. 1 of DeHaitre), and
a point at the other end of the shaft (32 in Fig. 4 of DeHaitre),
a first portion of the shaft adjacent the point being threaded (16 in Fig. 4 of DeHaitre),
and extending about one-half the total length of the shaft (from line 6, part 4 of DeHaitre, stating, "...the shank 16 occupies approximately one-half of the total length of the screw 10."), and
a second portion of the shaft adjacent the head not being threaded (12 in Fig. 1 of DeHaitre), said second portion having a plurality of spaced rings (12 in Fig. 1 of DeHaitre in view of 28 in Fig. 1 of Godfrey).

As for Claim 2, Re: Claim 1, DeHaitre shows a low torque wood screw comprising a knurled portion between said first and second portions (18 in Fig. 1 of DeHaitre).

As for Claim 3, Re: Claim 1, DeHaitre shows a low torque wood screw wherein said first portion has asymmetrical threads (the threads near the tip of the screw, 32 in Fig. 1 of DeHaitre, compared with the threads near the end of the first portion of 16 in Fig. 1 of DeHaitre).

As for Claim 4, Re: Claim 1, DeHaitre, in view of substituting the rings, 28 in Fig. 1, from Godfrey to the non-threaded section portion, 12 in Fig. 1 of DeHaitre, shows a screw having three radial lobes (28 in Fig. 1 of Godfrey).

As for Claim 5, Re: Claim 1, DeHaitre, in view of substituting the rings, 28 in Fig. 1, from Godfrey to the non-threaded section portion, 12 in Fig. 1 of DeHaitre, shows a screw comprising three said rings, wherein said rings are unequally spaced with respect to each other (As stated from line 43, part 4 of Godfrey, stating, "It will be understood that the shape of the

Art Unit: 3677

rings 26 and their dimensions with respect to the shank 24 and to the underside of the head may vary...and that the exact shapes of the deformable rings may vary somewhat from the form shown, depending upon the exact characteristics desired and also upon manufacturing considerations.”).

As for Claim 6, Re: Claim 1, DeHaitre, in view of substituting the rings, 28 in Fig. 1, from Godfrey to the non-threaded section portion, 12 in Fig. 1 of DeHaitre, shows a screw wherein said shaft has a total length TL from an inside surface of said head to said point, the fastener comprising three of said rings, a first of said rings being located about .23 TL from said inside surface, a second of said rings being located about .16 TL from said inside surface, and a third of said rings being located about .07 TL from said inside surface (As stated from line 43, part 4 of Godfrey, stating, “It will be understood that the shape of the rings 26 and their dimensions with respect to the shank 24 and to the underside of the head may vary...and that the exact shapes of the deformable rings may vary somewhat from the form shown, depending upon the exact characteristics desired and also upon manufacturing considerations.”).

As for Claim 7, Re: Claim 1, DeHaitre, in view of substituting the rings, 28 in Fig. 1, from Godfrey to the non-threaded section portion, 12 in Fig. 1 of DeHaitre, shows a screw comprising three said rings, wherein said rings are equally spaced with respect to each other (26 in Fig. 1 of Godfrey).

Lastly, as for Claim 8, Re: Claim 1, DeHaitre, in view of substituting the rings, 28 in Fig. 1, from Godfrey to the non-threaded section portion, 12 in Fig. 1 of DeHaitre, shows a screw wherein said shaft has a total length TL from an inside surface of said head to said point, the fastener comprising three of said rings, a first of said rings being located about .13 TL from said

Art Unit: 3677

inside surface, a second of said rings being located about .08 TL from said inside surface, and a third of said rings being located about .04 TL from said inside surface (As stated from line 43, part 4 of Godfrey, stating, "It will be understood that the shape of the rings 26 and their dimensions with respect to the shank 24 and to the underside of the head may vary...and that the exact shapes of the deformable rings may vary somewhat from the form shown, depending upon the exact characteristics desired and also upon manufacturing considerations.")

Conclusion

[5] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

[6] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is 703-305-4805. Due to a future move, however, this number will change after the 31st of March. After this date, the


Art Unit: 3677

examiner can be reached at (571) 272- 7082. The examiner can normally be reached on 7:30 am - 5:00 pm M-Th, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,
David Reese
Examiner
Art Unit 3677


ROBERT J. SANDY
PRIMARY EXAMINER